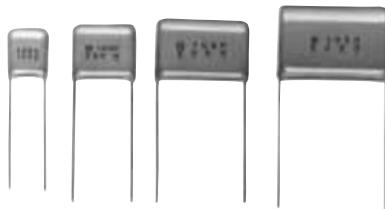


### Metallized Polyester Film Capacitor

#### Type: ECQE(F)

Non-inductive construction using metallized Polyester film with flame retardant epoxy resin coating



#### ■Features

- ◆ Self-healing property
- ◆ Excellent electrical characteristics
- ◆ Flame retardant epoxy resin coating

#### ■Recommended Applications

- ◆ General purpose usage

#### ■Explanation of Part Numbers

1 <b>E</b>	2 <b>C</b>	3 <b>Q</b>	4 <b>E</b>	5 	6 	7 	8 	9 	10 	11 <b>F</b>	12 
Product code	Dielectric & construction	Rated volt.	Capacitance	Cap. Tol.	Suffix						
		1 100VDC 2 250VDC 4 400VDC 6 630VDC	10 1000VDC 12 1250VDC 1A 125VAC 2A 250VAC	J ±5% K ±10% M ±20%	Blank B W 3 9	Type 1 Type 2 Type 3 Ammo Reel	Straight Crimped lead Crimped taping Crimped taping				

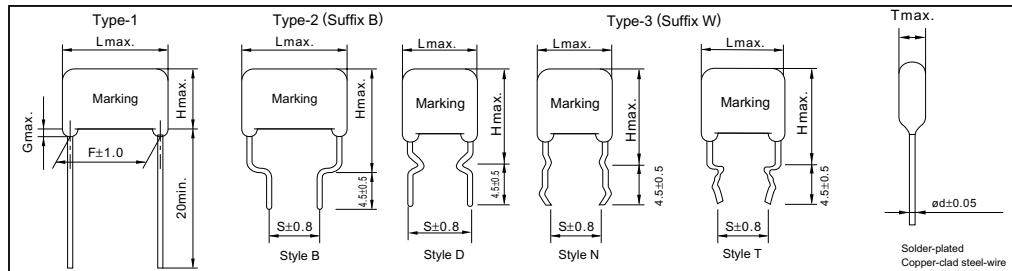
#### ●Explanation of Part Number for Odd Size Taping

1 <b>E</b>	2 <b>C</b>	3 <b>Q</b>	4 <b>E</b>	5 	6 	7 	8 	9 	10 	11 	12 
Product code	Dielectric & construction	Rated volt.	Capacitance	Cap. Tol.	Suffix						

#### ■Specifications

Category temp. range	-40 to +85°C (+105°C.....75% of Rated voltage)	
Rated voltage	100VDC, 250VDC, 400VDC, 630VDC, 1000VDC, 1250VDC, 125VAC, 250VAC	
Capacitance range	0.001 to 10μF(E-12)	
Capacitance tolerance	±5%(J), ±10%(K), ±20%(M)	
Dissipation factor	1.0%max. (20°C, 1kHz)	
Withstand voltage	<ul style="list-style-type: none"><li>◆ Rated volt. 100V to 630VDC Between terminals : Rated volt.(VDC)×150% 60s</li><li>◆ Rated volt. 1000VDC, 1250VDC Between terminals : Rated volt.(VDC)×175% 2 to 5s or 1000VAC 60s Between terminals to enclosure : 1500VAC 60s</li><li>◆ Rated volt. 125VAC, 250VAC Between terminals : Rated volt.(VAC)×230% 60s Between terminals to enclosure : 1500VAC 60s</li></ul>	
Insulation resistance	100V to 630VDC:	C ≤ 0.33μF : 9000MΩmin. (20°C, 100VDC 60s) C > 0.33μF : 3000MΩ · μFmin.
	1000VDC, 1250VDC:	10000MΩmin. (20°C, 100VDC 60s) 2000MΩmin. (20°C, 500VDC 60s)
	125VAC, 250VAC:	2000MΩmin. (20°C, 500VDC 60s)

■Dimensions in mm(not to scale)

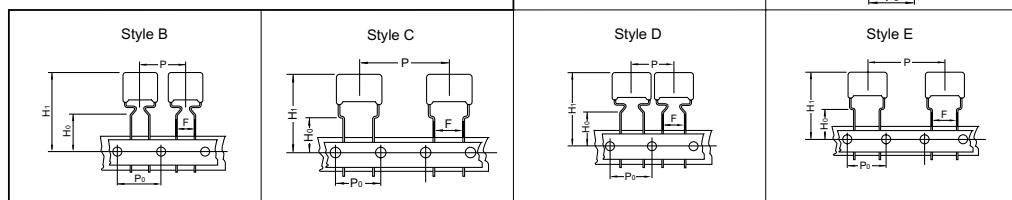


■Packaging Specifications for Bulk Package

Packing quantity:100pcs./bag

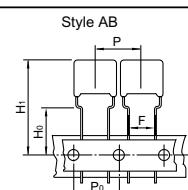
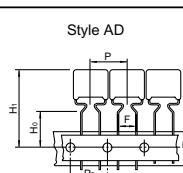
■Taping Specifications for Automatic Insertion

●Taping style



●Packaging Specifications

Type	Rated volt.	Cap. range ( $\mu$ F)	Taping style						Packing	suffix
			AD	AS	AB	B	C	D		
ECQE (F)	100VDC	0.56 to 0.68	<input type="radio"/>						Ammo	( ) F3
		0.56 to 0.68	<input type="radio"/>						Reel	( ) F9
		0.82 to 1.0			<input type="radio"/>				Ammo	( ) F3
		1.2 to 3.3				<input type="radio"/>			Ammo	( ) F3
		1.2 to 3.3					<input type="radio"/>		Ammo	R( ) F
	250VDC	0.01 to 0.27	<input type="radio"/>						Ammo	( ) F3
		0.33			<input type="radio"/>				Ammo	( ) F3
		0.39 to 1.5				<input type="radio"/>			Ammo	( ) F3
		0.01 to 0.33					<input type="radio"/>		Ammo	R( ) F
		0.39 to 1.5						<input type="radio"/>	Ammo	R( ) F
	400VDC	0.01 to 0.1	<input type="radio"/>						Ammo	( ) F3
		0.12 to 0.47				<input type="radio"/>			Ammo	( ) F3
		0.01 to 0.1	<input type="radio"/>						Reel	( ) F9
		0.01 to 0.1					<input type="radio"/>		Ammo	R( ) F
		0.12 to 0.47						<input type="radio"/>	Ammo	R( ) F
	630VDC	0.01 to 0.033	<input type="radio"/>						Ammo	( ) F3
		0.039 to 0.047			<input type="radio"/>				Ammo	( ) F3
		0.056 to 0.22				<input type="radio"/>			Ammo	( ) F3
		0.01 to 0.047	<input type="radio"/>						Reel	( ) F9
		0.01 to 0.047					<input type="radio"/>		Ammo	R( ) F
	1000VDC	0.001 to 0.1					<input type="radio"/>		Ammo	R( ) F
		0.001 to 0.022						<input type="radio"/>	Ammo	R( ) F
		0.01 to 0.15	<input type="radio"/>						Ammo	( ) F6
	1250VDC	0.18 to 0.47			<input type="radio"/>				Ammo	( ) F3
		0.01 to 0.22				<input type="radio"/>			Ammo	R( ) F
		0.27 to 0.47					<input type="radio"/>		Ammo	R( ) F
		0.01 to 0.033	<input type="radio"/>						Ammo	( ) F6
	250VAC	0.01 to 0.047		<input type="radio"/>				<input type="radio"/>	Ammo	R( ) F
		0.056 to 0.22						<input type="radio"/>	Ammo	R( ) F



●Lead Spacing

Style	Lead Spacing
AD	5.0mm
AB	5.0mm
B	5.0mm
C	5.0mm
D	7.5mm
E	7.5mm

\* See the column "Rating, Dimensions & Quantity Box" for packing quantity.

# Panasonic

## Metallized Polyester Film Capacitor

### ■Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 100VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.	F	S	G max.	Ød	Standard 5mm	Odd size 5mm	7.5mm Ammo	
ECQE1564□F( )	0.56	12.0	5.5	10.9	15.9	10.0	10.0	1.0	0.60	500	—	—
ECQE1684□F( )	0.68	12.0	6.0	11.9	16.9	10.0	10.0	1.0	0.60			
ECQE1824□F( )	0.82	12.0	6.0	13.5	18.5	10.0	10.0	1.0	0.60			
ECQE1105□F( )	1.0	12.0	6.7	14.0	19.0	10.0	10.0	1.0	0.60			
ECQE1125□F( )	1.2	18.5	5.5	12.8	17.8	15.0	10.0	1.0	0.60			
ECQE1155□F( )	1.5	18.5	6.0	13.4	18.4	15.0	10.0	1.0	0.80			
ECQE1185□F( )	1.8	18.5	6.5	14.4	19.4	15.0	10.0	1.0	0.80			
ECQE1225□F( )	2.2	18.5	7.0	15.0	20.0	15.0	10.0	1.0	0.80			
ECQE1275□F( )	2.7	18.5	8.0	15.8	20.8	15.0	10.0	1.0	0.80			
ECQE1335□F( )	3.3	18.5	8.5	16.5	21.5	15.0	10.0	1.0	0.80			
ECQE1395□F( )	3.9	26.0	7.0	16.4	21.4	22.5	15.0	1.0	0.80	500	500	400
ECQE1475□F( )	4.7	26.0	7.5	17.0	22.0	22.5	15.0	1.0	0.80			
ECQE1565□F( )	5.6	26.0	8.3	17.5	22.5	22.5	15.0	1.0	0.80			
ECQE1685□F( )	6.8	26.0	9.0	18.5	23.5	22.5	15.0	1.0	0.80			
ECQE1825□F( )	8.2	26.0	10.0	20.0	25.0	22.5	15.0	1.5	0.80			
ECQE1106□F( )	10.0	26.0	11.5	21.0	26.0	22.5	15.0	1.5	0.80			

↓ Suffix for lead crimped or taped type  
Cap. tol. code

StyleN,styleD:0.056 to 1.0 μF

StyleT,styleB:1.2 to 10.0 μF

### ■Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 250VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No	Cap. (μF)	Dimensions (mm)								Quantity		
		L max.	T max.	H max.	F	S	G max.	Ød	Standard 5mm	Odd size 5mm	7.5mm Ammo	
ECQE2103□F( )	0.01	10.3	4.3	7.4	12.4	7.5	7.5	1.0	0.60	1,000	—	—
ECQE2123□F( )	0.012	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2153□F( )	0.015	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2183□F( )	0.018	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2223□F( )	0.022	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2273□F( )	0.027	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2333□F( )	0.033	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2393□F( )	0.039	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2473□F( )	0.047	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE2563□F( )	0.056	10.3	4.8	7.9	12.9	7.5	7.5	1.0	0.60			
ECQE2683□F( )	0.068	10.3	4.5	7.5	12.5	7.5	7.5	1.0	0.60	500	1,000	1,000
ECQE2823□F( )	0.082	10.3	4.9	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE2823□F( )	0.082	10.3	4.9	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE2104□F( )	0.1	10.3	5.8	8.4	13.4	7.5	7.5	1.0	0.60			
ECQE2124□F( )	0.12	10.3	6.0	9.0	14.0	7.5	7.5	1.0	0.60			
ECQE2154□F( )	0.15	10.3	6.0	10.8	15.8	7.5	7.5	1.0	0.60			
ECQE2184□F( )	0.18	12.0	5.0	10.3	15.3	10.0	10.0	1.0	0.60			
ECQE2224□F( )	0.22	12.0	5.5	10.5	15.5	10.0	10.0	1.0	0.60			
ECQE2274□F( )	0.27	12.0	6.0	11.5	16.5	10.0	10.0	1.0	0.60			
ECQE2334□F( )	0.33	12.0	6.5	12.0	17.0	10.0	10.0	1.0	0.60			
ECQE2394□F( )	0.39	18.5	4.9	12.0	17.0	15.0	10.0	1.0	0.60	1,000	500	400
ECQE2474□F( )	0.47	18.5	5.3	12.5	17.5	15.0	10.0	1.0	0.60			
ECQE2564□F( )	0.56	18.5	5.5	13.0	18.0	15.0	10.0	1.0	0.60			
ECQE2684□F( )	0.68	18.5	6.0	13.5	18.5	15.0	10.0	1.0	0.80			
ECQE2824□F( )	0.82	18.5	6.5	14.5	19.5	15.0	10.0	1.0	0.80			
ECQE2105□F( )	1.0	18.5	7.4	15.0	20.0	15.0	10.0	1.0	0.80			
ECQE2125□F( )	1.2	18.5	8.0	15.9	20.9	15.0	10.0	1.0	0.80			
ECQE2155□F( )	1.5	18.5	9.0	16.8	21.8	15.0	10.0	1.0	0.80			
ECQE2185□F( )	1.8	26.0	7.5	15.5	20.5	22.5	15.0	1.0	0.80			
ECQE2225□F( )	2.2	26.0	8.5	16.3	21.3	22.5	15.0	1.0	0.80			
ECQE2275□F( )	2.7	26.0	9.4	17.0	22.0	22.5	15.0	1.0	0.80	400	300	—
ECQE2335□F( )	3.3	26.0	10.3	18.0	23.0	22.5	15.0	1.5	0.80			
ECQE2395□F( )	3.9	26.0	11.0	20.5	25.5	22.5	15.0	1.5	0.80			
ECQE2475□F( )	4.7	26.0	12.0	21.5	26.5	22.5	15.0	1.5	0.80			
ECQE2565□F( )	5.6	31.0	11.8	21.0	26.0	27.5	22.5	1.5	0.80			
ECQE2685□F( )	6.8	31.0	13.0	22.4	27.4	27.5	22.5	1.5	0.80			
ECQE2825□F( )	8.2	31.0	14.3	23.5	28.5	27.5	22.5	1.5	0.80			
ECQE2106□F( )	10.0	31.0	15.9	25.8	30.8	27.5	22.5	1.5	0.80			

↓ Suffix for lead crimped or taped type  
Cap. tol. code

StyleN,styleD:0.01 to 0.33 μF

StyleT,styleB:0.039 to 10.0 μF

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.  
Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.

# Panasonic

## Metallized Polyester Film Capacitor

■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 400VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No.	Cap. ( $\mu\text{F}$ )	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F		S		G max.	ød	
				Type-1	Type-2,3	Type-1	Type-2,3	Type-1	Type-2,3	Type-1		
ECQE4103_F()	0.01	10.3	4.3	7.4	12.4	7.5	7.5	1.0	0.60	1,000		
ECQE4123_F()	0.012	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4153_F()	0.015	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4183_F()	0.018	10.3	4.4	7.5	12.5	7.5	7.5	1.0	0.60			
ECQE4223_F()	0.022	10.3	4.8	7.9	12.9	7.5	7.5	1.0	0.60			
ECQE4273_F()	0.027	10.3	5.5	8.0	13.0	7.5	7.5	1.0	0.60			
ECQE4333_F()	0.033	10.3	6.0	9.0	14.0	7.5	7.5	1.0	0.60			
ECQE4393_F()	0.039	12.0	4.9	8.0	13.0	10.0	10.0	1.0	0.60			
ECQE4473_F()	0.047	12.0	5.0	8.3	13.3	10.0	10.0	1.0	0.60	500		
ECQE4563_F()	0.056	12.0	5.0	10.0	15.0	10.0	10.0	1.0	0.60			
ECQE4683_F()	0.068	12.0	5.4	10.5	15.5	10.0	10.0	1.0	0.60			
ECQE4823_F()	0.082	12.0	5.8	11.0	16.0	10.0	10.0	1.0	0.60			
ECQE4104_F()	0.1	12.0	6.3	12.0	17.0	10.0	10.0	1.0	0.60			
ECQE4124_F()	0.12	18.5	5.0	10.0	15.0	15.0	10.0	1.0	0.60			
ECQE4154_F()	0.15	18.5	5.0	12.4	17.4	15.0	10.0	1.0	0.60			
ECQE4184_F()	0.18	18.5	5.4	12.5	17.5	15.0	10.0	1.0	0.60			
ECQE4224_F()	0.22	18.5	5.9	13.0	18.0	15.0	10.0	1.0	0.60			
ECQE4274_F()	0.27	18.5	6.5	14.3	19.3	15.0	10.0	1.0	0.80			
ECQE4334_F()	0.33	18.5	7.0	14.9	19.9	15.0	10.0	1.0	0.80			
ECQE4394_F()	0.39	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80			
ECQE4474_F()	0.47	18.5	7.8	17.0	22.0	15.0	10.0	1.0	0.80			
ECQE4564_F()	0.56	26.0	6.5	16.0	21.0	22.5	15.0	1.0	0.80			
ECQE4684_F()	0.68	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80			
ECQE4824_F()	0.82	26.0	7.9	17.3	22.3	22.5	15.0	1.0	0.80			
ECQE4105_F()	1.0	26.0	8.5	18.0	23.0	22.5	15.0	1.0	0.80			
ECQE4125_F()	1.2	26.0	9.5	18.9	23.9	22.5	15.0	1.0	0.80			
ECQE4155_F()	1.5	31.0	9.5	19.0	24.0	27.5	22.5	1.0	0.80			
ECQE4185_F()	1.8	31.0	11.0	20.5	25.5	27.5	22.5	1.5	0.80			
ECQE4225_F()	2.2	31.0	11.0	22.0	27.0	27.5	22.5	1.5	0.80			

StyleN,styleD:0.01 to 1.0  $\mu\text{F}$

StyleT,styleB:0.12 to 2.2  $\mu\text{F}$

● Rated voltage : 630VDC, Capacitance tolerance : ±5%(J), ±10%(K)

Part No.	Cap. ( $\mu\text{F}$ )	Dimensions (mm)								Quantity		
		L max.	T max.	H max.		F		S		G max.	ød	
				Type-1	Type-2,3	Type-1	Type-2,3	Type-1	Type-2,3	Type-1		
ECQE6103_F()	0.01	12.0	4.5	7.5	12.5	10.0	10.0	1.0	0.60	1,000		
ECQE6123_F()	0.012	12.0	4.5	7.8	12.8	10.0	10.0	1.0	0.60			
ECQE6153_F()	0.015	12.0	5.0	8.2	13.2	10.0	10.0	1.0	0.60			
ECQE6183_F()	0.018	12.0	4.9	10.0	15.0	10.0	10.0	1.0	0.60			
ECQE6223_F()	0.022	12.0	5.3	10.5	15.5	10.0	10.0	1.0	0.60			
ECQE6273_F()	0.027	12.0	5.5	10.9	15.9	10.0	10.0	1.0	0.60			
ECQE6333_F()	0.033	12.0	6.0	11.9	16.9	10.0	10.0	1.0	0.60	500		
ECQE6393_F()	0.039	12.0	6.0	13.4	18.4	10.0	10.0	1.0	0.60			
ECQE6473_F()	0.047	12.0	6.5	13.5	18.5	10.0	10.0	1.0	0.60			
ECQE6563_F()	0.056	18.5	5.4	10.5	15.5	15.0	10.0	1.0	0.60			
ECQE6683_F()	0.068	18.5	5.8	11.0	16.0	15.0	10.0	1.0	0.60			
ECQE6823_F()	0.082	18.5	6.5	12.0	17.0	15.0	10.0	1.0	0.60			
ECQE6104_F()	0.1	18.5	6.3	14.0	19.0	15.0	10.0	1.0	0.60			
ECQE6124_F()	0.12	18.5	6.3	14.5	19.5	15.0	10.0	1.0	0.80			
ECQE6154_F()	0.15	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80			
ECQE6184_F()	0.18	18.5	8.0	16.0	21.0	15.0	10.0	1.0	0.80			
ECQE6224_F()	0.22	18.5	9.0	16.5	21.5	15.0	10.0	1.0	0.80			
ECQE6274_F()	0.27	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80			
ECQE6334_F()	0.33	26.0	7.8	17.0	22.0	22.5	15.0	1.0	0.80			
ECQE6394_F()	0.39	26.0	8.5	17.9	22.9	22.5	15.0	1.0	0.80			
ECQE6474_F()	0.47	26.0	9.3	18.5	23.5	22.5	15.0	1.0	0.80			
ECQE6564_F()	0.56	26.0	10.0	20.0	25.0	22.5	15.0	1.5	0.80			
ECQE6684_F()	0.68	26.0	11.5	21.0	26.0	22.5	15.0	1.5	0.80			
ECQE6824_F()	0.82	31.0	11.3	20.5	25.5	27.5	22.5	1.5	0.80			
ECQE6105_F()	1.0	31.0	12.5	21.9	26.9	27.5	22.5	1.5	0.80			
ECQE6125_F()	1.2	31.0	13.5	23.0	28.0	27.5	22.5	1.5	0.80			
ECQE6155_F()	1.5	31.0	15.3	24.7	29.7	27.5	22.5	1.5	0.80			
ECQE6185_F()	1.8	31.0	16.8	27.0	32.0	27.5	22.5	1.5	0.80			
ECQE6225_F()	2.2	31.0	19.5	29.0	34.0	27.5	22.5	1.5	0.80			

└ Suffix for lead crimped or taped type.

Cap. tol. code

StyleN,styleD:0.01 to 0.047  $\mu\text{F}$

StyleT,styleB:0.056 to 2.2  $\mu\text{F}$

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.

Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.

# Panasonic

## Metallized Polyester Film Capacitor

### ■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 1000VDC, 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)								Quantity
		L max.	T max.	H max.		F Type-1	S Type-1	G max.	$\varnothing$ d Type-1	
ECQE10102□ E( F( )	0.001		15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60
	0.0012		15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60
	0.0015		15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60
	0.0018		15.5	6.0	11.0	16.0	12.5	10.0	1.0	0.60
	0.0022		15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60
	0.0027		15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60
	0.0033		15.5	6.0	11.5	16.5	12.5	10.0	1.0	0.60
	0.0039		15.5	6.5	12.0	17.0	12.5	10.0	1.0	0.60
	0.0047		15.5	7.0	12.5	17.5	12.5	10.0	1.0	0.60
	0.0056		15.5	7.5	13.0	18.0	12.5	10.0	1.0	0.60
ECQE10682□ E( F( )	0.0068		15.5	7.0	12.5	17.5	12.5	10.0	1.0	0.60
	0.0082		15.5	6.5	12.0	17.0	12.5	12.5	1.0	0.60
	0.01		15.5	6.0	11.0	16.0	12.5	12.5	1.0	0.60
	0.012		15.5	6.0	12.0	17.0	12.5	12.5	1.0	0.60
	0.015		15.5	7.0	12.5	17.5	12.5	12.5	1.0	0.60
	0.018		15.5	7.5	13.0	20.0	12.5	12.5	1.0	0.80
	0.022		15.5	7.5	15.5	22.5	12.5	12.5	1.0	0.80
	0.027		21.0	6.0	13.0	18.0	17.5	12.5	1.0	0.80
	0.033		21.0	6.5	14.0	19.0	17.5	12.5	1.0	0.80
	0.039		21.0	7.0	14.5	19.5	17.5	12.5	1.0	0.80
ECQE10473□ E( F( )	0.047		21.0	7.5	15.5	20.5	17.5	12.5	1.0	0.80
	0.056		21.0	7.5	17.0	22.0	17.5	12.5	1.0	0.80
	0.068		21.0	8.5	18.0	23.0	17.5	12.5	1.0	0.80
	0.082		21.0	9.0	18.5	23.5	17.5	12.5	1.0	0.80
	0.1		21.0	10.0	20.0	25.0	17.5	12.5	1.0	0.80
	0.12		26.0	9.0	18.5	23.5	22.5	17.5	1.0	0.80
	0.15		26.0	10.0	20.0	25.0	22.5	17.5	1.5	0.80
	0.18		26.0	10.5	22.0	27.0	22.5	17.5	1.5	0.80
	0.22		26.0	12.0	23.0	28.0	22.5	17.5	1.5	0.80
										—

suffix for lead crimped or taped type.

Cap. tol. code

StyleD: 0.001 to 0.022  $\mu$ F

StyleB: 0.027 to 0.22  $\mu$ F

### Note)

Making for rated voltage

Type E: (1000V)

Type F: (1000V, 125V~)

# Panasonic

## Metallized Polyester Film Capacitor

### ■ Rating, Dimensions & Quantity/Ammo Box

● Rated voltage : 1250VDC, 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Quantity Ammo
		L <sub>max.</sub>	T <sub>max.</sub>	H <sub>max.</sub>	F	S	G <sub>max.</sub>	Ød	
Type-1	Type-2	Type-1	Type-2	Type-1	Type-2	Type-1			
ECQE12102□ <sup>E( )</sup> <sub>F( )</sub>	0.001	15.5	6.0	11.0	16.0	12.5	10.0	1.0	500
ECQE12122□ <sup>E( )</sup> <sub>F( )</sub>	0.0012	15.5	6.0	11.0	16.0	12.5	10.0	1.0	
ECQE12152□ <sup>E( )</sup> <sub>F( )</sub>	0.0015	15.5	6.0	11.0	16.0	12.5	10.0	1.0	
ECQE12182□ <sup>E( )</sup> <sub>F( )</sub>	0.0018	15.5	6.0	11.0	16.0	12.5	10.0	1.0	
ECQE12222□ <sup>E( )</sup> <sub>F( )</sub>	0.0022	15.5	6.0	11.5	16.5	12.5	10.0	1.0	
ECQE12272□ <sup>E( )</sup> <sub>F( )</sub>	0.0027	15.5	6.5	12.0	17.0	12.5	10.0	1.0	
ECQE12332□ <sup>E( )</sup> <sub>F( )</sub>	0.0033	15.5	6.0	11.5	16.5	12.5	10.0	1.0	
ECQE12392□ <sup>E( )</sup> <sub>F( )</sub>	0.0039	15.5	6.5	12.0	17.0	12.5	10.0	1.0	
ECQE12472□ <sup>E( )</sup> <sub>F( )</sub>	0.0047	15.5	7.0	12.5	17.5	12.5	10.0	1.0	
ECQE12562□ <sup>E( )</sup> <sub>F( )</sub>	0.0056	15.5	7.5	13.0	18.0	12.5	10.0	1.0	
ECQE12682□ <sup>E( )</sup> <sub>F( )</sub>	0.0068	15.5	7.5	15.0	20.0	12.5	10.0	1.0	400
ECQE12822□ <sup>E( )</sup> <sub>F( )</sub>	0.0082	21.0	5.0	12.0	17.0	17.5	12.5	1.0	500
ECQE12103□ <sup>E( )</sup> <sub>F( )</sub>	0.01	21.0	5.0	12.5	17.5	17.5	12.5	1.0	
ECQE12123□ <sup>E( )</sup> <sub>F( )</sub>	0.012	21.0	5.5	13.0	18.0	17.5	12.5	1.0	
ECQE12153□ <sup>E( )</sup> <sub>F( )</sub>	0.015	21.0	6.0	13.5	18.5	17.5	12.5	1.0	
ECQE12183□ <sup>E( )</sup> <sub>F( )</sub>	0.018	21.0	6.5	14.5	19.5	17.5	12.5	1.0	
ECQE12223□ <sup>E( )</sup> <sub>F( )</sub>	0.022	21.0	7.0	15.0	20.0	17.5	12.5	1.0	
ECQE12273□ <sup>E( )</sup> <sub>F( )</sub>	0.027	26.0	6.0	15.5	20.5	22.5	17.5	1.0	
ECQE12333□ <sup>E( )</sup> <sub>F( )</sub>	0.033	26.0	6.5	16.0	21.0	22.5	17.5	1.0	
ECQE12393□ <sup>E( )</sup> <sub>F( )</sub>	0.039	26.0	7.0	16.5	21.5	22.5	17.5	1.0	
ECQE12473□ <sup>E( )</sup> <sub>F( )</sub>	0.047	26.0	8.0	17.0	22.0	22.5	17.5	1.0	
ECQE12563□ <sup>E( )</sup> <sub>F( )</sub>	0.056	31.0	7.5	17.0	22.0	27.5	22.5	1.0	0.80
ECQE12683□ <sup>E( )</sup> <sub>F( )</sub>	0.068	31.0	8.0	17.5	22.5	27.5	22.5	1.0	0.80
ECQE12823□ <sup>E( )</sup> <sub>F( )</sub>	0.082	31.0	9.0	18.5	23.5	27.5	22.5	1.0	0.80
ECQE12104□ <sup>E( )</sup> <sub>F( )</sub>	0.1	31.0	10.0	19.5	24.5	27.5	22.5	1.0	0.80
ECQE12124□ <sup>E( )</sup> <sub>F( )</sub>	0.12	31.0	11.5	20.5	25.5	27.5	22.5	1.5	0.80
ECQE12154□ <sup>E( )</sup> <sub>F( )</sub>	0.15	31.0	12.0	23.0	28.0	27.5	22.5	1.5	0.80
ECQE12184□ <sup>E( )</sup> <sub>F( )</sub>	0.18	31.0	13.0	24.5	29.5	27.5	22.5	1.5	0.80
ECQE12224□ <sup>E( )</sup> <sub>F( )</sub>	0.22	31.0	14.5	26.5	31.5	27.5	22.5	1.5	0.80

suffix for lead crimped or taped type.

Cap. tol. code

StyleD: 0.001 to 0.0068  $\mu$ F  
StyleB: 0.0082 to 0.22  $\mu$ F

### Note)

Making for rated voltage

Type E: (1250V)

Type F: (1250V, 125V~)

■ Rating, Dimensions & Quantity/Ammo Box

- Rated voltage : 125VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)
- Noise suppression Capacitors (Across-the-line)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Quantity	
		L max.	T max.	H max.	F	S	G max.	$\phi$ d		
				Type-1	Type-2,3	Type-1	Type-2,3			
ECQE1A103 F( )	0.01	10.5	4.5	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A123 F( )	0.012	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A153 F( )	0.015	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A183 F( )	0.018	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A223 F( )	0.022	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A273 F( )	0.027	10.5	4.4	7.5	12.5	7.5	7.5	1.0	0.60	
ECQE1A333 F( )	0.033	10.5	4.5	7.8	12.8	7.5	7.5	1.0	0.60	
ECQE1A393 F( )	0.039	10.5	4.5	7.8	12.8	7.5	7.5	1.0	0.60	
ECQE1A473 F( )	0.047	10.5	5.5	8.0	13.0	7.5	7.5	1.0	0.60	
ECQE1A563 F( )	0.056	10.5	5.9	8.5	13.5	7.5	7.5	1.0	0.60	
ECQE1A683 F( )	0.068	10.5	6.3	9.4	14.4	7.5	7.5	1.0	0.60	
ECQE1A823 F( )	0.082	10.5	6.5	9.8	14.8	7.5	7.5	1.0	0.60	
ECQE1A104 F( )	0.1	10.5	6.5	11.8	16.8	7.5	7.5	1.0	0.60	
ECQE1A124 F( )	0.12	12.5	5.9	11.5	16.5	10.0	10.0	1.0	0.60	
ECQE1A154 F( )	0.15	12.5	6.5	12.0	17.0	10.0	10.0	1.0	0.60	
ECQE1A184 F( )	0.18	12.5	7.0	12.5	17.5	10.0	10.0	1.0	0.60	
ECQE1A224 F( )	0.22	12.5	7.5	13.4	18.4	10.0	10.0	1.0	0.60	
ECQE1A274 F( )	0.27	18.5	6.3	12.0	17.0	15.0	10.0	1.0	0.60	
ECQE1A334 F( )	0.33	18.5	6.9	12.5	17.5	15.0	10.0	1.0	0.60	
ECQE1A394 F( )	0.39	18.5	7.4	13.0	18.0	15.0	10.0	1.0	0.60	
ECQE1A474 F( )	0.47	18.5	7.5	15.3	20.3	15.0	10.0	1.0	0.60	

\* \* Capacitance value over 0.47 $\mu$ F is available. Please consult us.

StyleN, styleD: 0.01 to 0.22  $\mu$ F  
StyleT, styleB: 0.27 to 0.47  $\mu$ F

● Rated voltage : 250VAC, Capacitance tolerance : ±5%(J), ±10%(K), ±20%(M)

- Noise suppression Capacitors (Across-the-line)

Part No.	Cap. ( $\mu$ F)	Dimensions (mm)							Quantity	
		L max.	T max.	H max.	F	S	G max.	$\phi$ d		
				Type-1	Type-2	Type-1	Type-2			
ECQE2A103 F( )	0.01	12.5	5.5	10.8	15.8	10.0	10.0	1.0	0.60	
ECQE2A123 F( )	0.012	12.5	6.0	11.5	16.5	10.0	10.0	1.0	0.60	
ECQE2A153 F( )	0.015	12.5	6.3	9.9	14.9	10.0	10.0	1.0	0.60	
ECQE2A183 F( )	0.018	12.5	6.0	11.9	16.9	10.0	10.0	1.0	0.60	
ECQE2A223 F( )	0.022	12.5	6.0	11.5	16.5	10.0	10.0	1.0	0.60	
ECQE2A273 F( )	0.027	12.5	5.5	10.9	15.9	10.0	10.0	1.0	0.60	
ECQE2A333 F( )	0.033	12.5	6.0	11.9	16.9	10.0	10.0	1.0	0.60	
ECQE2A393 F( )	0.039	12.5	6.0	13.4	18.4	10.0	10.0	1.0	0.60	
ECQE2A473 F( )	0.047	12.5	6.5	14.4	19.4	10.0	10.0	1.0	0.60	
ECQE2A563 F( )	0.056	18.5	5.4	10.5	15.5	15.0	10.0	1.0	0.60	
ECQE2A683 F( )	0.068	18.5	5.8	11.0	16.0	15.0	10.0	1.0	0.60	
ECQE2A823 F( )	0.082	18.5	6.3	12.0	17.0	15.0	10.0	1.0	0.60	
ECQE2A104 F( )	0.1	18.5	6.3	14.0	19.0	15.0	10.0	1.0	0.60	
ECQE2A124 F( )	0.12	18.5	6.8	14.5	19.5	15.0	10.0	1.0	0.80	
ECQE2A154 F( )	0.15	18.5	7.5	15.4	20.4	15.0	10.0	1.0	0.80	
ECQE2A184 F( )	0.18	18.5	8.0	16.0	21.0	15.0	10.0	1.0	0.80	
ECQE2A224 F( )	0.22	18.5	9.0	16.9	21.9	15.0	10.0	1.0	0.80	
ECQE2A274 F( )	0.27	26.0	7.0	16.5	21.5	22.5	15.0	1.0	0.80	
ECQE2A334 F( )	0.33	26.0	7.8	17.0	22.0	22.5	15.0	1.0	0.80	
ECQE2A394 F( )	0.39	26.0	8.5	17.9	22.9	22.5	15.0	1.0	0.80	
ECQE2A474 F( )	0.47	26.0	9.3	18.5	23.5	22.5	15.0	1.0	0.80	

suffix for lead crimped or taped type.

Cap. tol. code

styleD: 0.01 to 0.047  $\mu$ F

styleB: 0.056 to 0.47  $\mu$ F

\* When using these capacitors as an across-the-line capacitor it shall be required to follow either item 1. or item 2. condition.

1. Capacitor shall be connected in parallel with varistor (Specified varistor voltage in table 1.)

2. Voltage applied for capacitor shall not exceed other than specified in table 1, when using these capacitors.

Table 1

Cap. Rated Voltage	Varistor voltage	Pulse voltage
125VAC	250V	250V <sub>b-P</sub>
250VAC	470V	630V <sub>b-P</sub>

Design and specifications are subject to change without notice. Ask factory for technical specifications before purchase and/or use.

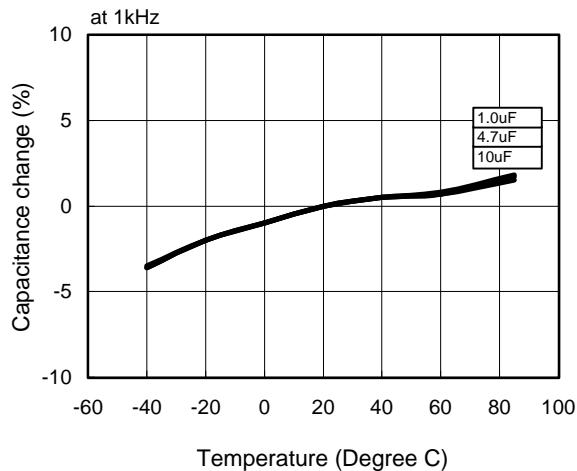
Whenever a doubt about safety arises from this product, please contact us immediately for technical consultation.

**Panasonic**

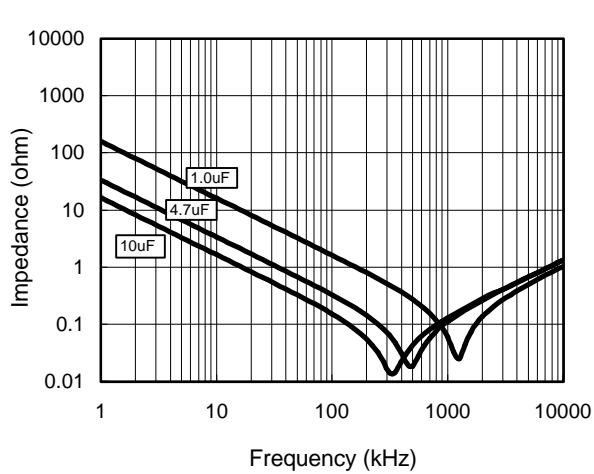
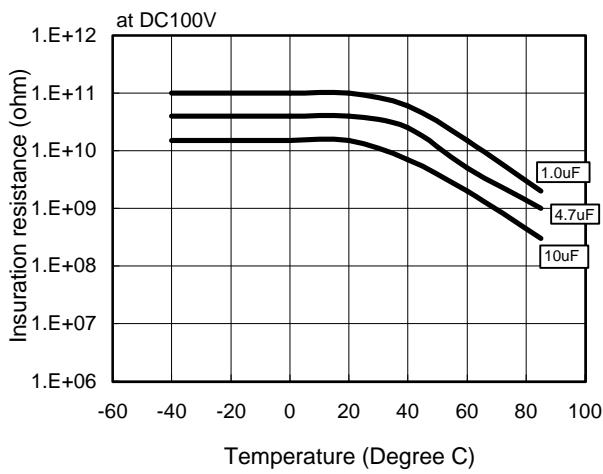
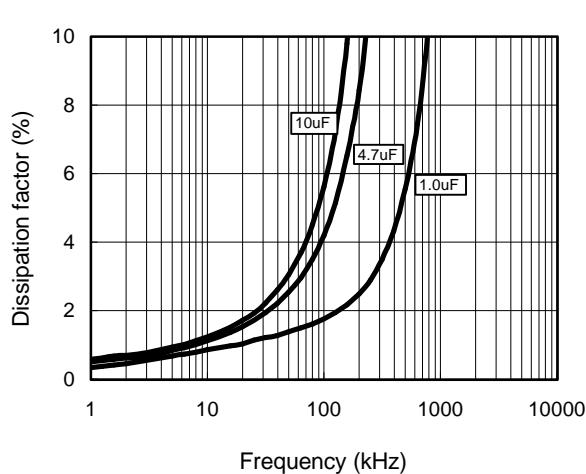
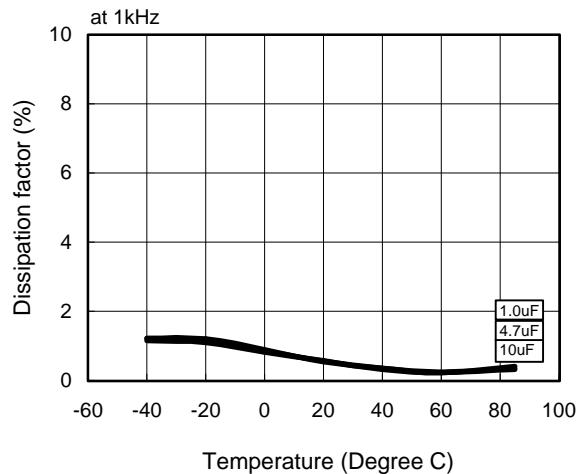
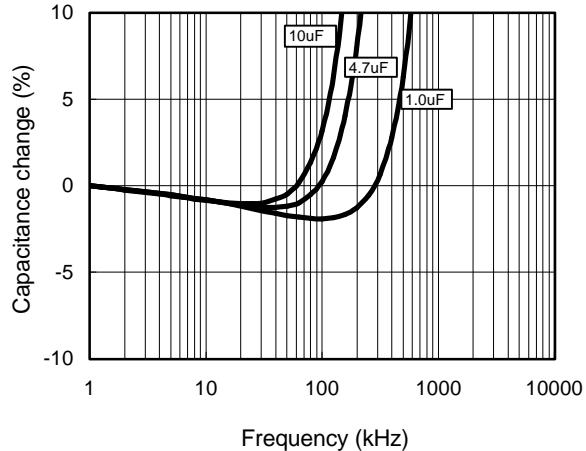
## **ECQE(F) Type 100VDC Series (Metallized Polyester Film)**

### **Erectical Characteristics <Typical Data>**

**Temperature Characteristics**



**Frequency Characteristics**

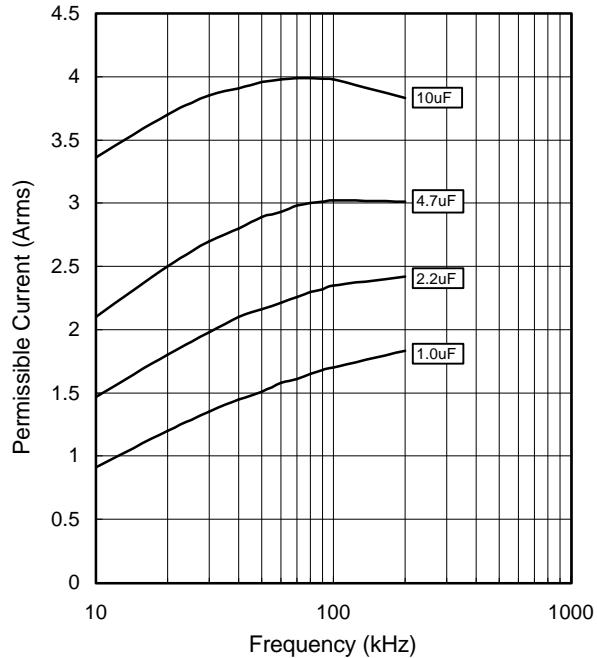


**Panasonic**

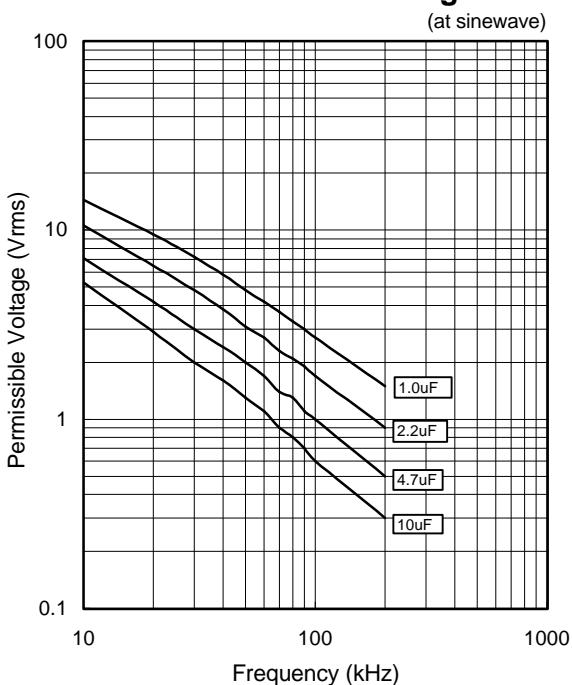
## ECQE(F) Type 100VDC Series (Metallized Polyester Film)

### Applicable Specifications

#### Permissible Current



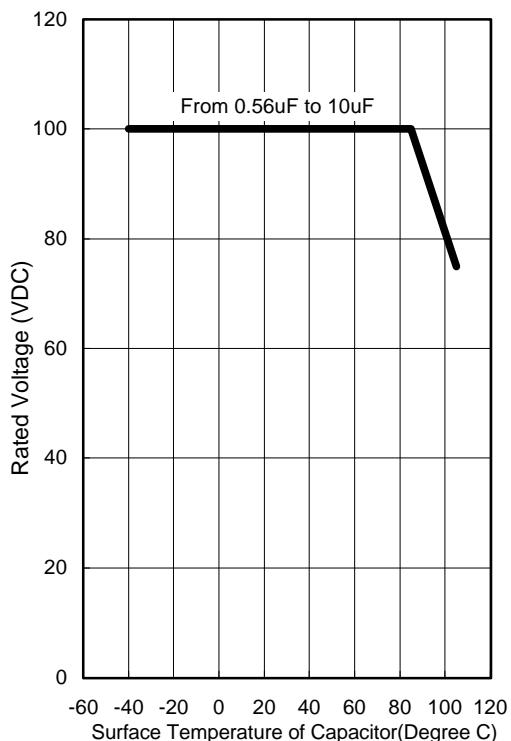
#### Permissible Voltage



#### Pulse Handling Capability (dV/dt) (Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
100VDC	0.56	564	22	12.32
	0.68	684		15.0
	0.82	824		18.0
	1.00	105		22.0
	1.20	125	11	13.2
	1.50	155		17.1
	1.80	185		19.8
	2.20	225		24.2
	2.70	275	6	29.7
	3.30	335		36.3
	3.90	395		23.4
	4.70	475		28.2
	5.60	565		33.6
	6.80	685		40.8
	8.20	825		49.2
	10.00	106		60.0

#### Voltage Derating by Temperature



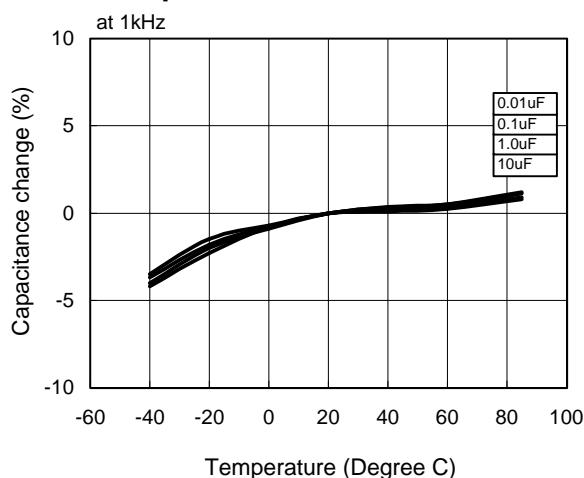
\* Please consult Panasonic if your condition exceeds the above spec.

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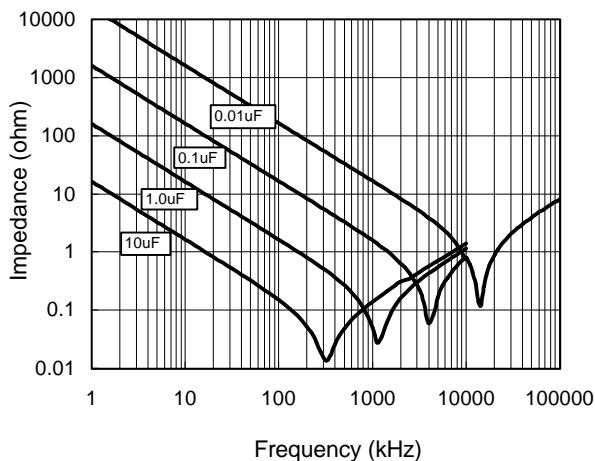
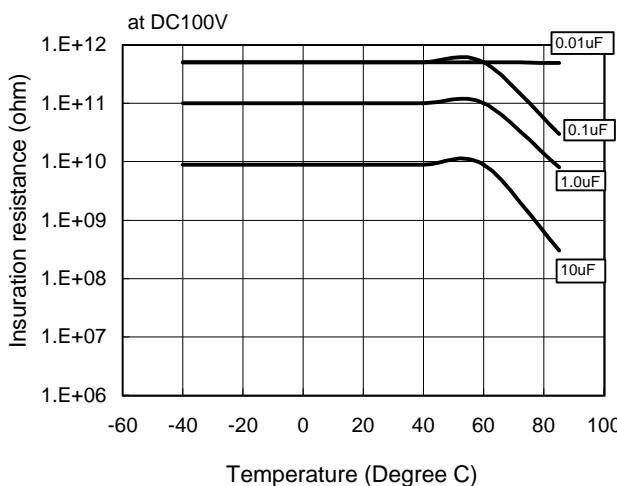
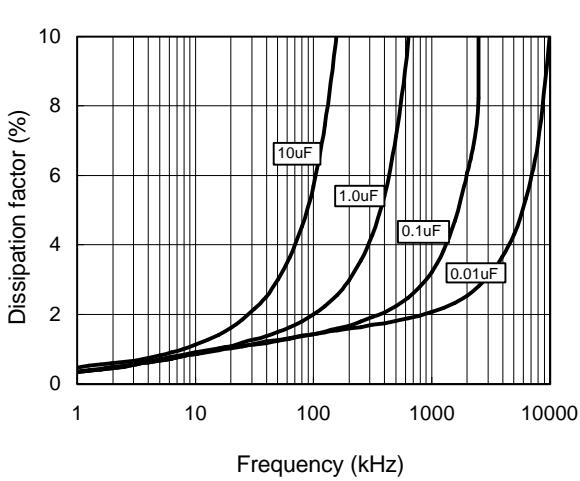
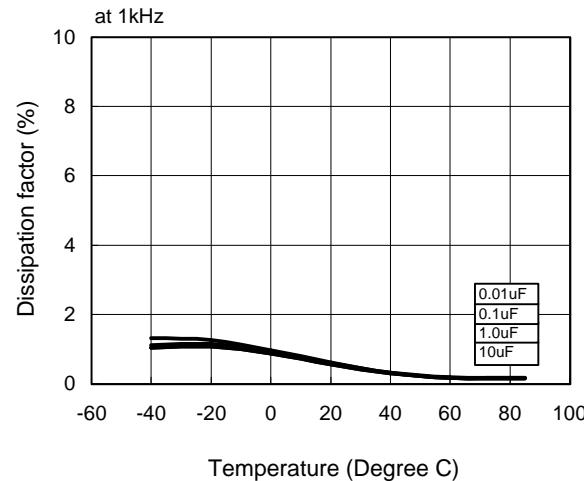
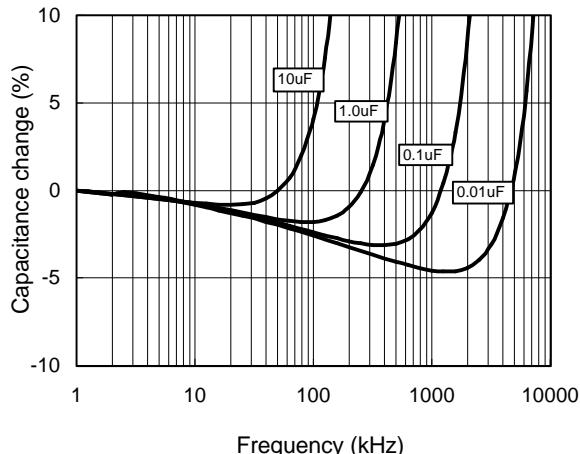
## **ECQE(F) Type 250VDC Series (Metallized Polyester Film)**

### **Erectical Characteristics <Typical Data>**

**Temperature Characteristics**



**Frequency Characteristics**

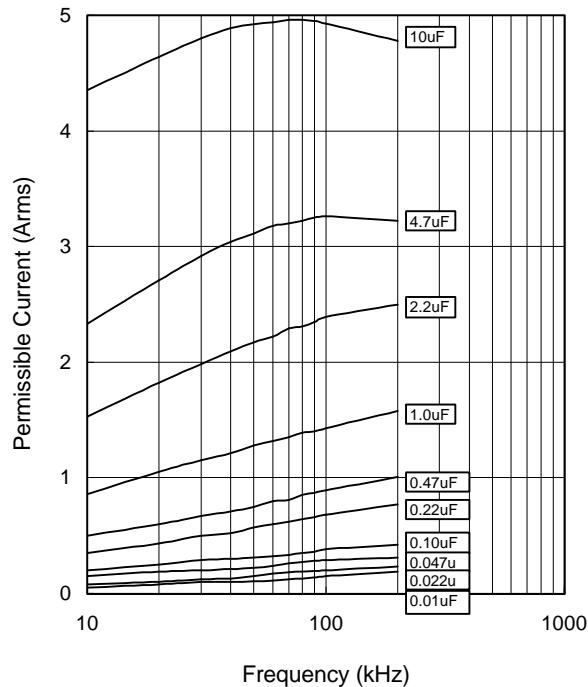


**Panasonic**

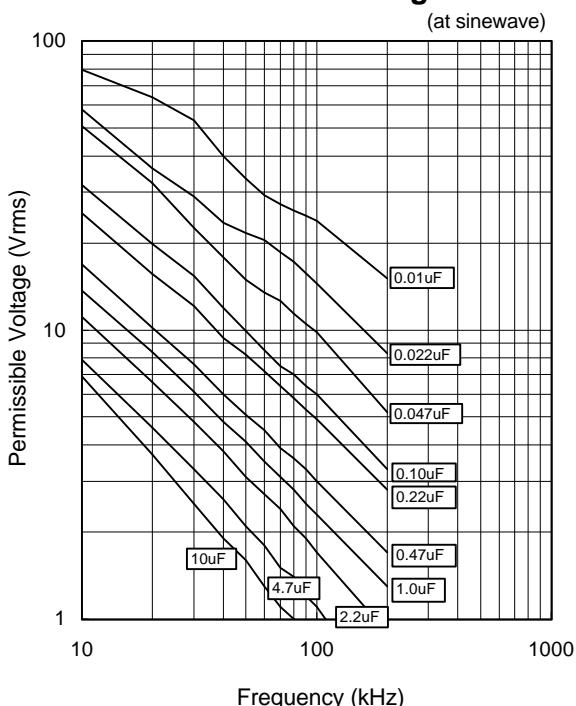
## ECQE(F) Type 250VDC Series (Metallized Polyester Film)

### Applicable Specifications

#### Permissible Current



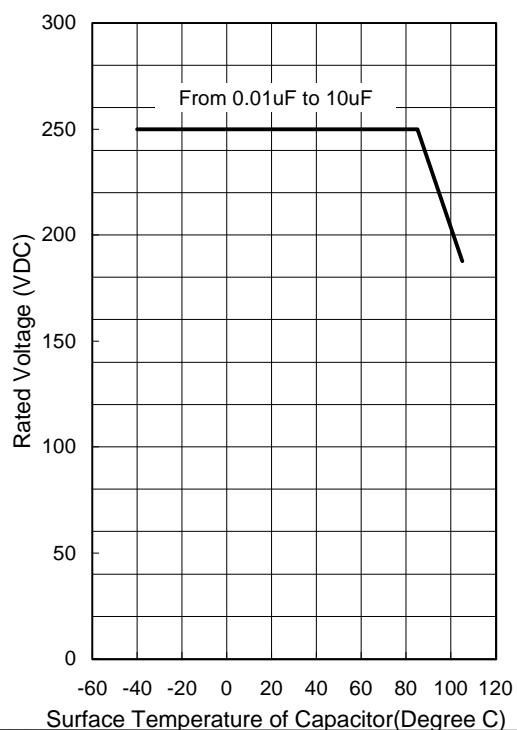
#### Permissible Voltage



#### Pulse Handling Capability (dV/dt) (Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
250VDC	0.010	103	48	0.48
	0.015	153		0.72
	0.022	223		1.06
	0.033	333		1.58
	0.047	473		2.26
	0.068	683		3.26
	0.100	104		4.80
	0.150	154		7.20
	0.220	224		7.26
	0.330	334		10.89
	0.470	474		8.46
	0.680	684		12.24
	1.000	105		18.00
	1.500	155		27.00
	2.200	225		22.00
	3.300	335		33.00
	4.700	475		47.00
	6.800	685		54.40
	10.000	106		80.00

#### Voltage Derating by Temperature

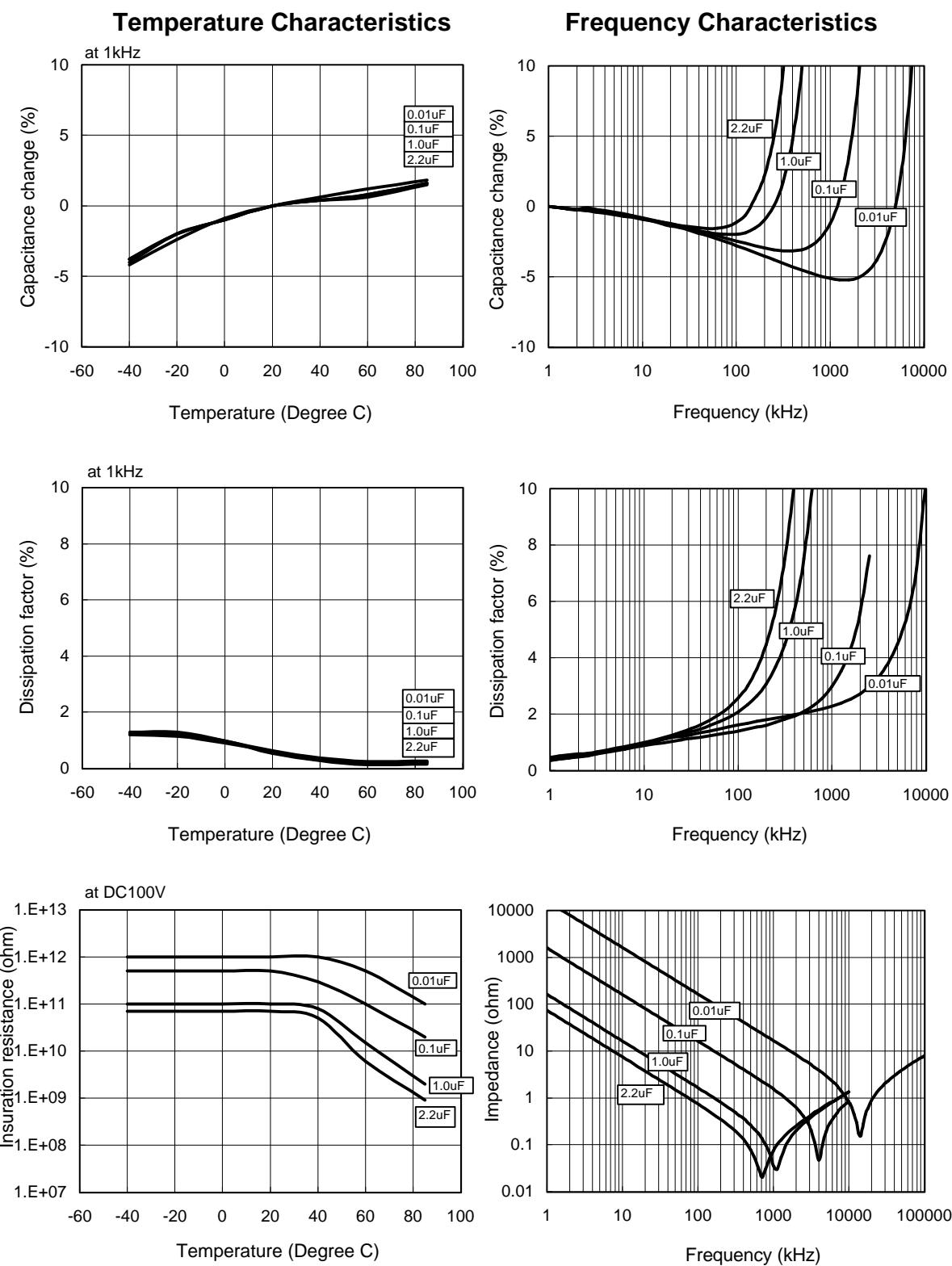


\* Please consult Panasonic if your condition exceeds the above spec.

**Panasonic**

## **ECQE(F) Type 400VDC Series (Metallized Polyester Film)**

### **Erectical Characteristics <Typical Data>**

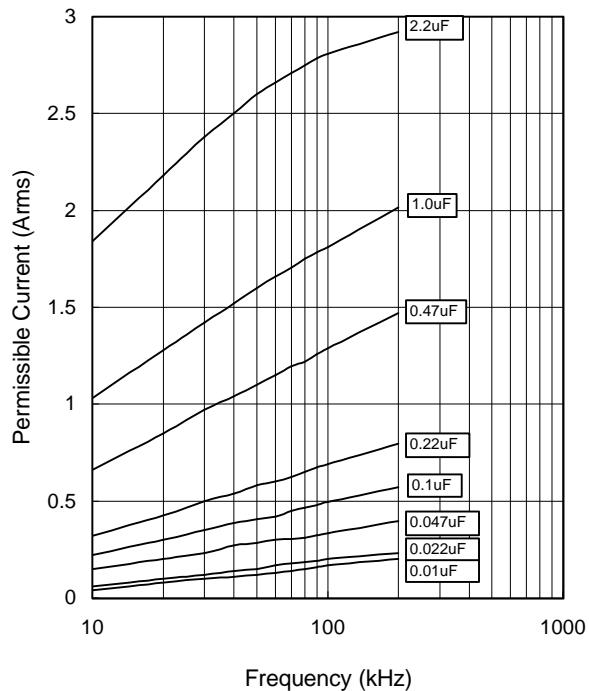


**Panasonic**

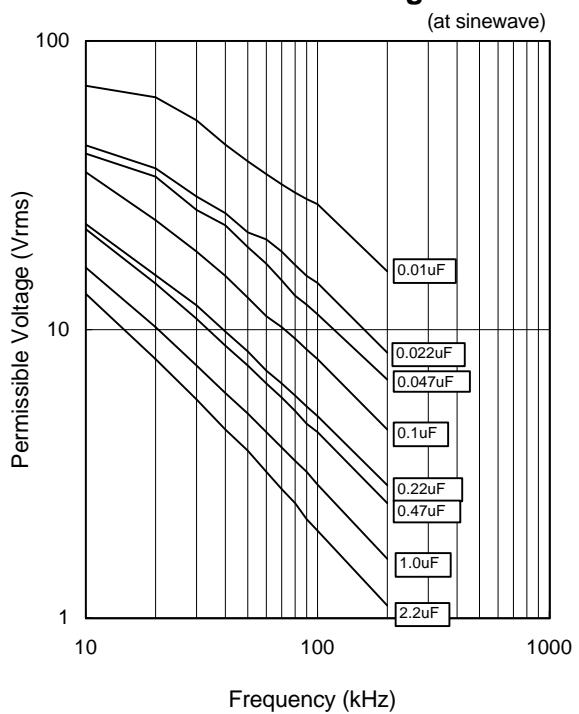
## ECQE(F) Type 400VDC Series (Metallized Polyester Film)

### Applicable Specifications

#### Permissible Current



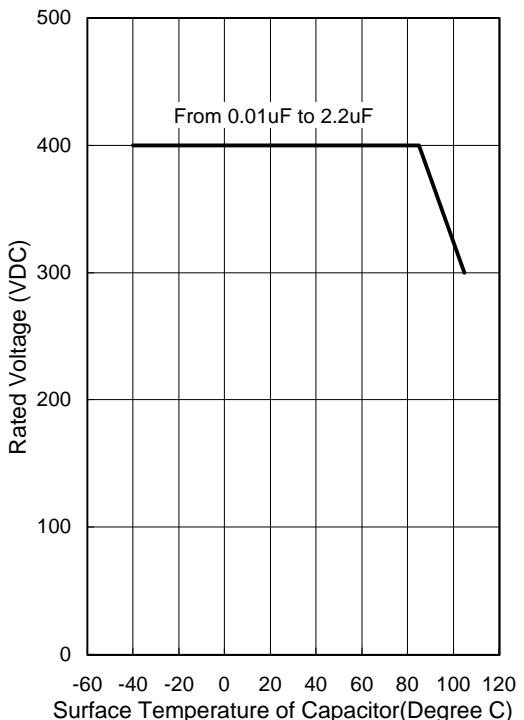
#### Permissible Voltage



#### Pulse Handling Capability (dV/dt) (Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
400VDC	0.010	103	131	1.31
	0.015	153		1.97
	0.022	223		2.88
	0.033	333		4.32
	0.047	473	78	3.67
	0.068	683		5.30
	0.100	104		7.80
	0.150	154		5.55
	0.220	224	37	8.14
	0.330	334		12.21
	0.470	474		17.39
	0.680	684		14.96
	1.000	105		22.00
	1.200	155	18	27.00
	2.200	225		39.60

#### Voltage Derating by Temperature

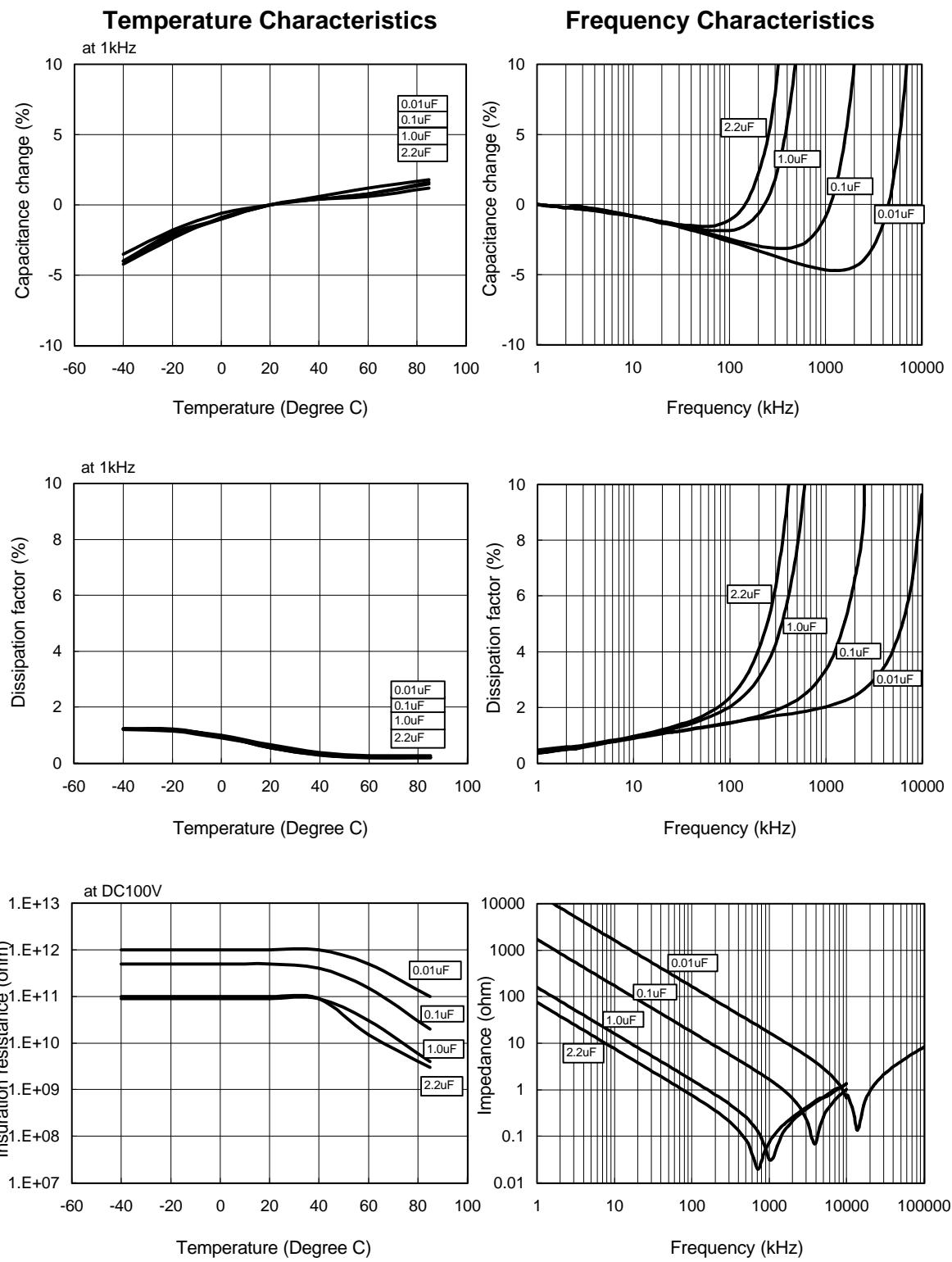


\* Please consult Panasonic if your condition exceeds the above spec.

**Panasonic**

## ECQE(F) Type 630VDC Series (Metallized Polyester Film)

### Erectical Characteristics <Typical Data>

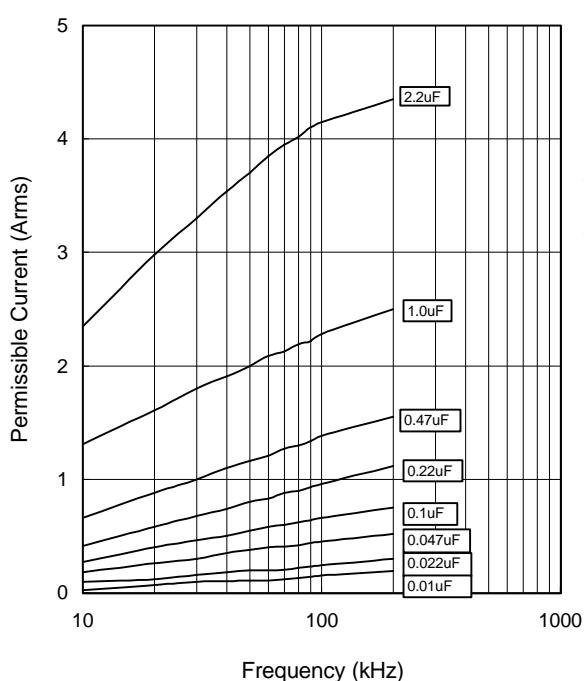


**Panasonic**

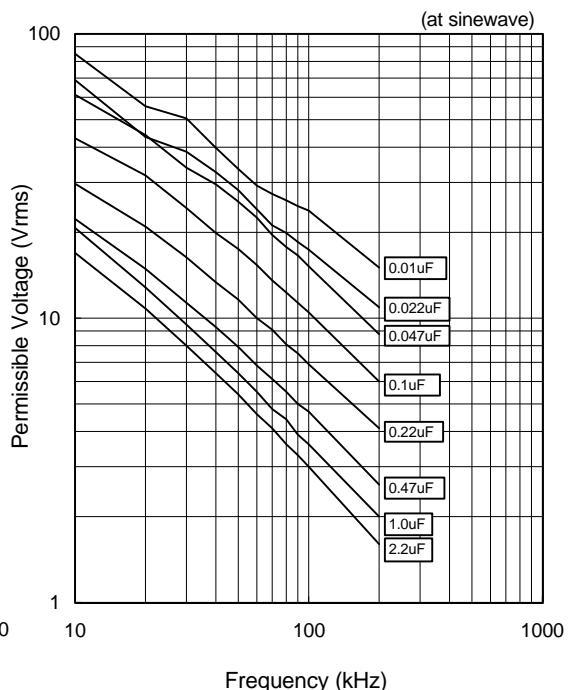
## ECQE(F) Type 630VDC Series (Metallized Polyester Film)

### Applicable Specifications

#### Permissible Current



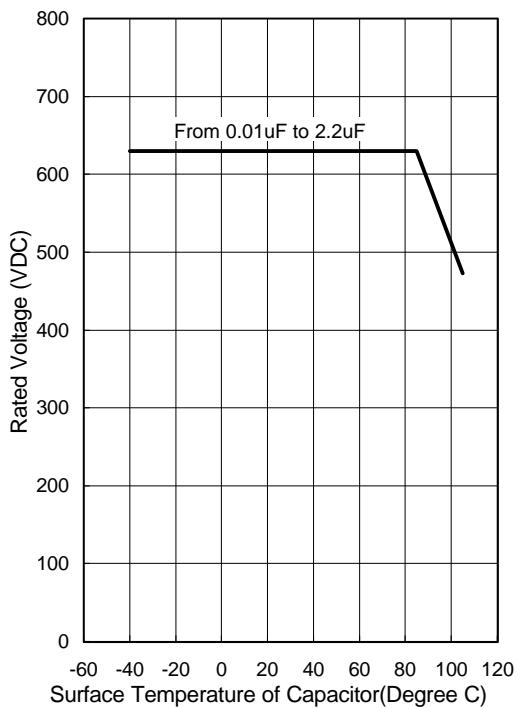
#### Permissible Voltage



#### Pulse Handling Capability (dV/dt) (Max 10000cycles)

Rating Voltage	Capacitance Value(uF)	Code	dV/dt(V/us)	Current(o-p) (A)
630VDC	0.010	103	273	2.73
	0.015	153		4.10
	0.022	223		6.01
	0.033	333		9.01
	0.047	473		12.83
	0.068	683	116	7.89
	0.100	104		11.60
	0.150	154		17.40
	0.220	224		25.52
	0.330	334	63	20.79
	0.470	474		29.61
	0.680	684		42.84
	1.000	105	48	48.00
	1.500	155		72.00
	2.200	225		105.60

#### Voltage Derating by Temperature



\* Please consult Panasonic if your condition exceeds the above spec.